



Weekly Aviation Headline News

WORLD NEWS

WFS fast tracks cargo sustainability in Spain

AVITRADER Deblications

Worldwide Flight Services' (WFS) cargo and ground handling operations in Spain are helping to spearhead the group's 'Our Sustainable Flight Path' programme with a series of initiatives and investments to significantly reduce emissions at its seven airport stations across the country. WFS' GSE fleet in Spain is now 89% electric for all its cargo handling operations as well as 30% of the company's ramp handling equipment. This includes electric towing tractors, passenger stairs and belt loaders, aircraft pushback tugs, and other heavyduty vehicles.

Etihad Cargo to boost China freighter capacity

Etihad Cargo plans to further expand its capacity offering to the Chinese market with the introduction of an additional weekly Abu Dhabi - Shanghai freighter flight from 2 February 2023. The additional freighter service to Shanghai will increase the carrier's weekly dedicated freighter flights between Shanghai and its Abu Dhabi hub to eight per week, increasing the cargo capacity out of Shanghai to 850 tonnes. The latest network update follows the announcement that Etihad will introduce an additional non-stop widebody passenger flight to Shanghai from 2 February 2023.

Korean Air to resume more European routes from March

Korean Air will resume services to four major destinations in Europe starting from March. After a threeyear hiatus due to the pandemic, the airline will restart the Prague and Zurich routes from the end of March, followed by the resumption of the Istanbul and Madrid routes at the end of April. Starting from March 27, the airline will resume its operations to Prague three times a week and Zurich services will also begin from March. Services to Istanbul and Madrid will resume from April 27, 2023.



Back to court after two 737 MAX crashes in 2018 and 2019.

© Boeina

Boeing heads back to court this week

Arraigned on criminal charges over MAX crashes

As it turns out, a Texas federal judge has now ruled that Boeing must report on January 26, 2023, in a Texas courtroom to be arraigned on federal criminal charges in the deaths of the 346 who

were killed in two Boeing 737 MAX crashes in 2018 and 2019. according aviation litigation firm Clifford Law.

Initially, Boe-

ing was granted immunity from the U.S. Department of Justice as part of a \$2.5 billion deferred prosecution agreement entered into in January 2021 regarding fraud involving the flawed design of the MAX aircraft that was never revealed to the proper authorities and officials before it was allowed to fly in the skies.

U.S. District Judge Reed O'Connor of the Northern District of Texas

located in Fort Worth is now asking Boeing to appear in court for an arraignment because the victims' families were not a part of the process, and he ruled under the Crime Victims' Rights Act,

It is rare in U.S. aviation law history that a corporation is arraigned on criminal charges regarding the deaths of plane crash victims. **Clifford Law**

> they should have been. Lawyers said it was rare in U.S. aviation law history that a corporation is arraigned on criminal charges regarding the deaths of plane crash victims

> The crashes in 2018 and 2019 in Indonesia and Ethiopia, which cost Boeing more than \$20 billion, led to a 20-month grounding of its best-selling aircraft and prompted the U.S. Congress to

pass legislation reforming aircraft certification.

Back in September 2022, Boeing agreed to pay \$200 million in fines for allegedly misleading the public about the safety of its

> 737 MAX aircraft that crashed twice, leaving 346 people dead in 2018 and 2019.

The corporation's fired CEO, Dennis Muilenburg, also agreed to pay fines set by the Securities and Exchange

Commission (SEC) that stated Boeing and Muilenburg knew that part of the aircraft's flight control system was flawed and posed an ongoing safety concern yet told the public that the 737 MAX was safe to fly. The crashes led to the aircraft being grounded around the world for some 20 months, one of the longest groundings in aviation history.

TrueNoord acquires portfolio of ten Embraer aircraft from Nordic Aviation Capital

TrueNoord, the specialist regional aircraft lessor, has completed a sale agreement for eight Embraer E190s and two E175s with Nordic Aviation Capital (NAC). This significant transaction increases TrueNoord's portfolio to 70 aircraft and brings new lessee airlines from North America, Canada and South Africa into the family, as well as increasing TrueNoord's footprint with existing European airline customers in France and Portugal. The complete integration of all ten Embraer jets is targeted to be finalised in Q1 2023. The transaction will be financed by TrueNoord's current warehouse facility provided by Citibank, Société Générale Corporate & Investment Banking, Royal Bank of Canada, and NordLB. This funds new acquisitions and supports TrueNoord's targeted growth strategy in the 50- to 150-seat market segment, which is endorsed by cornerstone investors: Freshstream, BlackRock, abrdn, and others. Legal advisers Pillsbury acted on behalf of TrueNoord. With this sizeable transaction, TrueNoord is demonstrating solid confidence in the value proposition that regional aircraft are offering and in a recovery of the market in the coming years. This is underscored by the relative ease of transitioning aircraft that come off-lease and according to Anne-Bart Tieleman, CEO-TrueNoord, it is a positive trend and the first portfolio deal in the market since COVID-19.

ZeroAvia performs maiden test flight using 19-seat Dornier with hydrogen-electric engine

ZeroAvia, the US/UK hydrogen-electric aircraft developer has announced the successful maiden test flight of its 19-seat Dornier 228 testbed aircraft. The flight saw the Dornier become the world's largest aircraft to be flown with a full-size hydrogen-electric powertrain. The hydrogenelectric engine had been retrofitted to the left wing of the aircraft while a single Honeywell TPE-331 stock engine remained on the right wing. The plane took off from the company's R&D facility at Cotswold Airport in Gloucestershire, UK, and the flight lasted ten minutes. The aircraft completed taxi, take-off, a full pattern circuit and landing. This successful maiden flight forms part of the HyFlyer II project, a major R&D programme backed by the UK Government's flagship ATI Programme, which targets development of a 600kW powertrain to support 9-19 seat aircraft worldwide with zeroemission flight. This is the largest ZeroAvia engine tested so far and sees the company on target to achieve certification in 2023. ZeroAvia's 2-5 MW powertrain programme which is already in progress will scale the clean engine technology for up to 90seat aircraft, with further expansion into narrowbody aircraft demonstrators over the next decade.

Textron Aviation delivers 3,000th Cessna Caravan-family aircraft



Azul Conecta takes delivery of the 3,000th Cessna Caravan

© Textron Aviation

Textron Aviation has delivered a Cessna Grand Caravan EX to Brazilian aviation company Azul Conecta, a subsidiary of Azul Airlines based at Jundiai Airport in São Paulo. This aircraft represents the 3,000th Cessna Caravan-family turboprop delivered worldwide. Azul Conecta transports travellers from smaller cities and remote locations throughout Brazil. Conceived as a rugged utility aircraft with low operating costs, the Caravan was designed for use in remote areas with extreme weather changes, mountainous terrain and rough landing conditions. The aircraft's versatility is renowned in all corners of the world and the Caravan continues to see wide use in global markets by a variety of customers, including government agencies, law enforcement and militaries, air ambulance operators, freight haulers, corporations and humanitarian organisations.

Croatia Airlines to lease six brand-new Airbus jets from Air Lease Corporation



Rendering of Airbus A220 aircraft in Croatia Airlines' livery

© Airbus

Los Angeles-based Air Lease Corporation has announced that it has placed six brand-new Airbus jets on long-term lease with Croatia Airlines with delivery set to take place at the beginning of 2024 through to 2025. The leases are for four A220-300s and two A220-100s. "We are pleased to announce this lease placement for six new Airbus A220 aircraft with Croatia Airlines," said Steven F. Udvar-Házy, Executive Chairman of Air Lease Corporation. "ALC looks forward to a successful long-term relationship with Croatia Airlines as the airline modernises and expands its fleet with the newest and most fuel-efficient jets." Through its hub in Zagreb, Croatia Airlines serves dozens of destinations in Europe including Austria, Belgium, France, Germany, Italy, Netherlands, Switzerland and the United Kingdom.



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ZeroAvia's HyFlyer II programme to develop its ZA-600 hydrogen-electric engine and retrofit the Dornier 228 is being delivered in partnership with EMEC and Aeristech and is supported by the UK Government through the ATI Programme and the Department for Business, Energy Industrial Strategy, Innovate UK and Aerospace Technology Institute. There has also been significant commercial momentum for ZeroAvia in recent months, including an engine order from American Airlines, a partnership agreement with OEM Textron Aviation and infrastructure partnerships with airports including Rotterdam, Edmonton International and AGS Airports. The company also has 1,500 engines on pre-order, partnerships with seven aircraft manufacturers and a number of fuel and airport partnerships.

C&L Aviation Group delivers seventh Saab 340B Aircraft to Legends Airways

C&L Aviation Group has completed and delivered the seventh Saab 340B aircraft, on schedule, to Legends Airways. Legends Airways, which has taken possession of all aircraft, initially received its first aircraft in mid-2021. There has been a resurgence in interest in the Saab 340 aircraft during this same period and C&L has sold over twenty of these planes, including the former fleets of JAC and HAC. "In all my years dealing with the Saab 340 aircraft I have never seen demand for this aircraft at current levels. There has been a distinct increase in demand for the Saab 340B aircraft with both passenger and cargo operators. This has led to most parked Saab aircraft being restored to service," said Chris Kilgour, CEO of C&L Aviation Group. "With so many customers asking for aircraft and there being low availability, the market dynamics have changed. Demand has outstripped supply, resulting in increased sale prices for the Saab."

Coulson awarded Australian Large Air Tanker contract



© Coulson FireLiner aircraft

Coulson Aviation has been awarded the contract for Australia's National Large Air Tanker (LAT). The converted Boeing 737, Tanker 139, is the newest addition to Coulson's FireLiner™ fleet and will be based in Sydney, New South Wales but will support additional locations in-country as needed. As the National LAT, Tanker 139 will wear the name "Phoenix" as a result of a naming competition last year via local Australian schools. The 737 is in Australia funded by the Commonwealth Government through a partnership with the National Aerial Firefighting Centre (NAFC). The contract is for two years with the option to extend. Phoenix is equipped with Coulson Aviation's Retardant Aerial Delivery System (RADS), the company's patented tanking and release system. With RADS onboard, the aircraft is capable of dropping up to 4,000 gallons of retardant or water at flow rates of up to 3,000 gallons per second. The State and Territory agencies involved in firefighting and land management recognise that improved performance and other synergies may be obtained through cooperation and sharing of aircraft resources. The NAFC arrangements allow for the procurement and sharing of these resources nationally. Coulson Aviation is the only company in the world to convert a Boeing 737 commercial airliner into a multi-mission FireLiner™ aircraft. The Company has operated in Australia for almost 20 years, providing aerial support across multiple Australian States. Coulson's roots in aviation, combined with the company's proprietary technology, a wide array of aircraft types and welltrained attack crews, allow simultaneous aerial firefighting support across multiple regions.

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Flybondi welcomes Boeing 737-800 aircraft into its fleet

Flybondi, the first low-cost airline in Argentina, has welcomed 2023 with the announcement of good news and the continuation of its investment plan in the country. Flybondi's twelfth aircraft, a Boeing 737-800 NG, has arrived in Argentina from Arkansas, U.S.A. Flybondi will begin operating the aircraft after carrying out the pertinent administrative procedures for its certification and registration. As announced a few months ago, Flybondi was searching the leasing market for at least five more aircraft to add to its fleet during 2023. Thanks to the success of this plan, which allowed it to double the number of aircraft in its fleet, Flybondi has more than doubled its market share with respect to 2019. Currently holding a market share of 21% for domestic flights and 5% for international flights, the



© Flybondi

company has positioned and consolidated itself as the second-largest airline in the country. Additionally, its flights have an occupancy rate above 90%. Flybondi has recently announced its third inter-provincial route and from March 2., it will reconnect the provinces of Córdoba and Salta. This route will have three-weekly flights on Tuesdays, Thursdays and Saturdays. In the first few days of January 2023, the airline has reached six million passengers carried since the commencement of its operations. This number reflects the growth experienced by the company in the past two years in terms of market offer and share. It is worth noting that first-time flyers are still included among Flybondi's passengers: 20% of the passengers carried by the company are people who are flying for the first time.

Embraer wins order for 15 E195-E2 aircraft



© Embraer E195-E2 aircraft

Brazilian manufacturer Embraer has secured a firm order for 15 new E195-E2 aircraft from an undisclosed customer. The order is valued at US\$1.17 billion (£0.95 billion) at list price and will be added to the fourth-quarter 2022 backlog.

Delta Air Lines concludes order for 12 additional Airbus A220 aircraft

Delta Air Lines has firmed up an order for a dozen more A220-300 aircraft, bringing the airline's total firm order for A220s to 119 aircraft – 45 A220-100s and 74 A220-300s. Throughout the years, Delta has re-ordered the A220 four times and is today the largest A220 customer and operator. Delta took delivery of its first Airbus A220 in October 2018 and was the first U.S. carrier to operate the aircraft type. Delta currently owns a fleet of 415 Airbus aircraft, including 59 A220s, 266 A320-family aircraft, 62 A330s and 28 A350-900 aircraft.



Delta Air Lines has ordered 12 additional A220 aircraft

© Airbus

Uzbekistan Airways signs firm order for 12 A320neo-family aircraft



Illustration of Uzbekistan Airways' ordered Airbus aircraft

© Airbus

Uzbekistan Airways, the national carrier of the Republic of Uzbekistan, has placed a firm order with Airbus for 12 A320neofamily aircraft (eight A320neos and four A321neos). The new aircraft will join the carrier's current fleet of 17 Airbus A320family aircraft. The choice of the engines will be made by the airline at a later stage. The A320neo-family aircraft will feature the new Airbus Airspace cabin, bringing premium comfort to the single aisle market. The airline is planning to operate its new aircraft to further develop its domestic and international route network. "The contract signed with Airbus is a new step in our fleet modernisation strategy aimed at offering our passengers the most modern and comfortable aircraft. At the same time these new fuel-efficient A320neo-family aircraft will help us to further expand and strengthen our footprint in Central Asia as well as develop our domestic and international network", said Ilhom Makhkamov, Chairman of the Board of Uzbekistan Airways.



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NASA chooses Boeing to develop Transonic Truss-Braced Wing (TTBW) demonstrator airplane

NASA has selected Boeing and its industry team to lead the development and flight testing of a full-scale Transonic Truss-Braced Wing (TTBW) demonstrator airplane. The technologies demonstrated and tested as part of the sustainable flight demonstrator (SFD) programme will inform future designs and could lead to breakthrough aerodynamics and fuel efficiency gains. When combined with expected advancements in propulsion systems, materials and systems' architecture, a single-aisle airplane with a TTBW configuration could reduce fuel consumption and emissions up to 30% relative to today's most efficient single-aisle airplanes, depending on the mission. The SFD programme aims to advance the civil aviation industry's commitment to reaching net-zero carbon emissions by 2050, as well as the goals set forth in the White House's U.S. Aviation Climate Action Plan. "The SFD programme has the potential to make a major contribution toward a sustainable future," said Greg Hyslop, Boeing



Rendering of Transonic Truss-Braced Wing (TTBW) demonstrator airplane

@ Boeing

Chief Engineer and Executive Vice President of Engineering, Test & Technology. "It represents an opportunity to design, build and fly a full-scale experimental plane, while solving novel technical problems." Ultrathin wings braced by struts with larger spans and higher-aspect ratios could eventually accommodate advanced propulsion systems that are limited by a lack of underwing space in today's low-wing airplane configurations. For the demonstrator vehicle, Boeing will use elements from existing vehicles and integrate them with all-new components. NASA's funding through the SFD Space Act Agreement totals US\$425 million. The SFD programme will also leverage up to US\$725 million in funding by Boeing and its industry partners to shape the demonstrator programme and meet the resource needs required. Separately, Boeing's previous internal investments for recent phases of sustainable aviation research total US\$110 million. The TTBW airframe concept is the result of more than a decade of development supported by NASA, Boeing and industry investments. Under previous NASA programmes including the agency's Subsonic Ultra Green Aircraft Research programme, Boeing conducted extensive wind tunnel testing and digital modelling to advance the design of the TTBW. Early conceptual studies started under NASA's Environmentally Responsible Aviation programme. (£1.00 = US\$1.24 at time of publication).

Embraer's Phenom 300MED Receives FAA and EASA Certification



The Phenom 300MED received FAA and EASA certification

© Embraer

Type Certificate (STC) from the U.S. Federal Aviation Administration (FAA) and the European Union Aviation Safety Agency (EASA). The Phenom 300MED is a unique medevac solution for the Phenom 300 series aircraft. The STC was performed at Embraer's service centre in Fort Lauderdale, Florida, and will be operated by launch customer, on-demand charter operator Grandview Aviation. The Phenom 300MED aeromedical interior was specified by Embraer and developed and certified by engineering services provider umlaut, part of Accenture, utilizing Aerolite equipment. Aerolite developed the intensive care unit (ICU) specifically for the Phenom 300MED. As per the certification requirements, umlaut conducted an evacuation test to confirm two fully disabled patients could be evacuated. The medevac solution, which is available for new and inservice aircraft, is exclusively installed by Embraer's Services & Support organisation, ensuring the highest quality, reliability and service experience direct from the manufacturer.

The Phenom 300MED has received Supplemental

MRO & PRODUCTION NEWS

Lufthansa Technik Turbine Shannon expands operations

Irish company Lufthansa Technik Turbine Shannon (LTTS) is expanding its business and facility in response to growing market demand. With a new building in Shannon's Free Zone covering 2,000 m² and equipped with state-of-the-art technology, the company is increasing its capacity. It will offer new products for CFM56 and V2500 turbine engines powering Boeing 737 and Airbus A320 aircraft. Operations are set to commence in the new facility in the first quarter of 2023, offering new highly skilled jobs to the mid-west region of Ireland. After experiencing a sharp fall in activity during the COVID-19 crisis, LTTS has already created in excess of 100 jobs. The expansion will enable the company to grow in products for which there is strong demand in the foreseeable future. LTTS, a member of Lufthansa Technik's EPAR network (engine parts and accessories repair), specialises in the repair of components for both high-pressure and low-pressure turbines for CFMI, IAE, and GE aircraft engines. The company was originally founded in 1992, today employs a staff of more than 250 people, and has some 8,000 m² of floor space available at its existing site in Shannon Smithtown.



© Lufthansa Technik Turbine Shannon / photo: Eamon Ward

Pratt & Whitney officially opens India Engineering Center



Pratt & Whitney leaders inaugurate the India Engineering Center (IEC)

Pratt & Whitney

Pratt & Whitney, a Raytheon Technologies business, has officially opened the doors to its new India Engineering Center (IEC) in Bengaluru. The facility is co-located with Pratt & Whitney's India Capabilities Center (ICC), which opened in 2022 to provide integrated global supply chain support and the recently inaugurated Collins Aerospace engineering and global operations centres. The IEC, which was designed to meet the LEED Platinum certification, further enhances Raytheon Technologies' combined presence in India of over 5,000 employees and facilitates collaboration across the company's businesses. "The Indian aviation market is growing at a rapid pace and Bengaluru is a hub for that growth," said Geoff Hunt, Senior Vice President, Engineering, Pratt & Whitney. "The work conducted at the IEC – by some of India's best and brightest minds – will support cutting edge technology that will drive the future of flight." More than 50 employees are now based in the state-of-the-art facility, with an additional 450 jobs to be filled over the next four years. Work performed at the IEC will encompass elements such as aero and mechanical and control systems for various products in Pratt & Whitney's broad portfolio of large and small commercial engines. It will also extend across the entire product lifecycle from development to field support and sustainment.

MRO & PRODUCTION NEWS

Cargolux and GE Aerospace sign long-term support agreements for GE9X and GEnx engines



Cargolux Boeing 747-8F

© AirTeamImages

GE Aerospace and Cargolux, the Luxembourgbased all-cargo airline, have entered into a longterm support agreement for the GE9X powering Cargolux's new fleet of Boeing 777-8 freighters. The agreement includes a multi-year GE TrueChoice service agreement as well as the order of two spare engines. A TrueChoice services extension has also been agreed for Cargolux's Boeing 747-8F fleet powered by GEnx-2B engines. In October of last year Cargolux revealed plans to replace its ageing 747-400 freighter fleet with an order for ten Boeing 777-8F aircraft. The TrueChoice suite of engine maintenance offerings incorporate an array of GE capabilities and customizations across an engine's lifecycle. All TrueChoice offerings are underpinned by GE data and analytic capabilities and experience to help reduce maintenance burden and service disruptions for customers.

MRO & PRODUCTION NEWS

Seal Dynamics and Crane Aerospace & Electronics establish new partnership

Seal Dynamics, a subsidiary of HEICO, has partnered with Crane Aerospace & Electronics to exclusively distribute Crane's PL Porter brand mechanical seat actuation products to the commercial aerospace aftermarket. Crane products, particularly the PL Porter brand name, are well recognised and respected by airlines around the world. Seal Dynamics' ability to understand the complexities of the passenger seat aftermarket together with its technical sales capabilities is a powerful combination. This partnership will advance a new strategy to expand market share and raise customer satisfaction to bring exponential value to the airlines and MROs utilising and supporting a wide variety of seat programmes. Seal Dynamics, founded in 1976, with its corporate headquarters based in Hauppauge, NY, and with offices in the UK, Singapore, Dubai and Florida, is one of the world's largest technical sales distributors of aerospace components.

Aero Star Aviation receives Mexican AFAC repair station certification

Aero Star Aviation has received certification to be a Mexico AFAC repair station at its Dallas, TX facility. This certification provides safety and certification continuity between the FAA and Mexican aviation authorities. AFAC formulates government policy for the development of aviation in Mexico, oversees training, aviation infrastructure and technical development as well

Safran and Yellowhead Helicopters sign SBH® support contract



Contract signing between Safran and Yellowhead Helicopters

© Safran

Safran Helicopter Engines has signed a contract with Yellowhead Helicopters to support Arriel powering its AS350 and H125 fleets. This Support-By-the-Hour (SBH®) contract formalises a long-term MRO and services agreement supporting 21 engines. The will be managed by Safran Helicopter Engines Canada, in Mirabel, Quebec, which provides North American customers with support services for the Arriel and Arrius engines as well as repair and overhaul of engines, modules and accessories. With this service solution, Safran will support Yellowhead Helicopters in its mission for the forestry, mining, oil and gas, utility and tourism industries. CEO and Accountable Executive Yellowhead Helicopters, Jacob Forman said: "This partnership has grown over the past ten years. Within Yellowhead Helicopters, Safran Helicopter Engines Canada team is recognised as a top-tier partner providing exceptional support and service, integral in the continued growth and success of our company". SBH® is Safran Helicopter Engines' support-by-the-hour programme. It makes engine operating costs predictable, eliminates cash peaks and allows flexibility for scheduled and unscheduled MRO coverage.

as safety. "This additional certification provides our customers additional service opportunities and the flexibility to have their aircraft serviced in strategic locations as needed," said Chris Grinnell, owner/President, Aero Star Aviation. Aero Star Aviation is an approved FAA repair facility and aircraft maintenance company that specialises in Embraer Phenom 100 and 300 aircraft. Founded in 2013, with two locations in Dallas, Texas and Ft. Lauderdale, Florida, Aero Star Aviation offers aircraft maintenance, including scheduled maintenance, pre-purchase and ten-year inspections, engine change, line maintenance, wheel assembly exchange and AOG support.

FINANCIAL NEWS

United Airlines posts fourth-quarter and full-year financial results

United Airlines (United) has reported fourthquarter and full-year 2022 financial results. The company exceeded adjusted operating margin guidance in the fourth quarter reporting an 11.1% operating margin, an 11.2% operating margin on an adjusted basis. Additionally, the company reported a 9.1% pre-tax margin on a GAAP basis and 9.0% on an adjusted basis, achieving its 2023 target ahead of schedule. The company grew operating revenue by 14% and TRASM (total revenue per available seat mile) by 26%, both versus fourth quarter 2019. The company remains confident in the 2023 United Next adjusted pre-tax margin target of about 9%. United reported net income of US\$843 million, adjusted net income of US\$811 million for the fourth quarter and net income of US\$737 million, adjusted net income of US\$831 million for the full year 2022.

United was able to recover quickly from significant irregular operations in December as a result of winter storm Elliott. During the key

FINANCIAL NEWS

Lufthansa takes first steps in potential takeover of ITA Airways



© Lufthansa Group

Deutsche Lufthansa AG (Lufthansa) is looking to initially acquire a minority stake in Italian carrier ITA Airways (Italia Trasporto Aereo S.p.A.) with an option to purchase any remaining shares at a later stage. Lufthansa has submitted an offer to the Italian Ministry of Economy and Finance (Ministero dell'economia e delle finanze) to conclude a Memorandum of Understanding (MoU) in this respect. Once both parties have signed the MoU, further negotiations and discussions would then be conducted on an exclusive basis. Initial discussions will primarily focus on a possible equity investment by Lufthansa, the commercial and operational integration of ITA into the Lufthansa Airline Group, as well as resulting synergies. Should a binding agreement be reached, its implementation would be subject to approval by the relevant authorities. Headquartered in Rome, Italy and employing approximately 3,000 staff, ITA Airways was founded in 2020 and began commercial operations in 2021. It is fully owned by the Government of Italy via the Ministry of Economy and Finance after a decree was signed to permit Italy's flag-carrying airline Alitalia to reorganise as Italia Trasporto Aereo S.p.A.



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FINANCIAL NEWS

holiday travel days between December 21 and 26, nearly 36% of all United flights were exposed to severe weather. Despite that impact, 90% of United customers made it to their destination within four hours of their scheduled arrival time. The company credits significant investment in its people, resources, technology and infrastructure over the past few years with its ability to recover from significant weather events. (£1.00 =US\$1.24 at time of publication).

Astronics Corporation reports preliminary sales for fourth quarter 2022 of US\$155 million to US\$160 million

Astronics Corporation, a leading provider of advanced technologies for global aerospace, defence and other mission-critical industries, has reported preliminary revenue and orders and announced the completion of the refinancing of its debt. The company reported that unaudited preliminary fourth-quarter sales are expected to be in the range of US\$155 million to US\$160 million, exceeding the company's earlier guidance of US\$140 million to US\$150 million. The midpoint of the preliminary range represents a sequential increase in sales of 20% over the third quarter of 2022 and a 35% increase over the third quarter of 2021. Preliminary bookings in the fourth quarter are expected to be in the range of US\$175 million to US\$180 million. Peter J. Gundermann, Chairman, President and CEO, commented, "We continued to see strong order flow in the fourth quarter, as we have since the middle of 2021. We expect to report another positive book-to-bill quarter and another record ending backlog. More importantly, however, we finally saw the beginning of the sales ramp required to satisfy high demand as our supply chain continues to show improvement. We expect the sales ramp to endure as we move into 2023, consistent with our earlier revenue guidance for the year of US\$640 million to US\$680 million."

Astronics also announced that it has completed a financing transaction totalling US\$205 million, which refinanced its previous revolving credit facility that was scheduled to mature in November 2023. The new financing consists of a US\$90 million asset-based term loan and a US\$115 million asset-based revolving credit facility. The term loan has a scheduled maturity of January 19, 2027, an interest rate of SOFR plus 8.75% and is collateralised primarily by real estate, fixed assets and intellectual property. The revolving credit facility has a scheduled maturity of January 19, 2026, an interest rate of SOFR plus 2.25% to 2.75% and is collateralised primarily by inventory and accounts receivable. (£1.00 = US\$1.23 at time of publication).

INFORMATION TECHNOLOGY

Embraer has signed a contract with Vortex Aircraft Services for the use of Beacon, the maintenance coordination platform connecting resources professionals for faster return-to-service aircraft. Vortex Aircraft Services, U.S.-based company specialising in aircraft on ground (AOG) and scheduled maintenance events, will use Beacon to enhance maintenance coordination



Aircraft maintenance mechanic inspecting and working on jet engine

and responsiveness to AOG services, simplify communication around maintenance events of all types of aircraft models, increase team productivity and efficiency, improve knowledge exchange and streamline workflows. "As a fleet-agnostic platform, Beacon is an ideal partner for Vortex, a company providing maintenance and repair services on a broad range of aircraft from different original equipment manufacturers. Every minute counts in aviation. Beacon will help Vortex improve its coordination efficiency of AOG events and field maintenance, foster more effective collaboration and maintain its high standards of quick response to critical maintenance events," said Marco Cesarino, Head of Beacon.



Digital Tech Ops Ecosystem landscape

is creating a Digital Tech Ops Ecosystem by incorporating Swiss Aviation-Software (Swiss-AS) to lead the digital transformation the aviation industry in technical asset operation. Swiss-AS, the developer of the leading M&E/MRO software AMOS, is joining Lufthansa

Technik

Lufthansa

Technik Group. By bringing together AMOS with AVIATAR, the independent platform for Data & Analytics Solutions and flydocs, the provider of Digital Records & Asset Solutions, under one roof, Lufthansa Technik can now offer an unprecedented digital coverage of the tech-ops value stream: these three solutions are the pillars of the Digital Tech Ops Ecosystem that will create additional value for customers using a customer-centric and collaborative approach. In order to push the Digital Tech Ops Ecosystem, Lufthansa Group has decided to bundle all related activities under one organisational roof. For this purpose, Lufthansa Technik has purchased 100% of Swiss-AS shares from Swiss International Air Lines. Flydocs and AVIATAR are already part of Lufthansa Technik Group. The three entities remain independent but will enhance collaboration and join forces by connecting the dots between the modularly designed solutions. For the first time there will be comprehensive data coverage along the entire value stream in technical operations. This data, combined with the digital know-how in all three independent solution providers as well as Lufthansa Technik's engineering expertise will result in completely new offerings, accelerated digitalisation and added value for customers. As a result, the Ecosystem will reduce MRO costs, enhance process efficiency, increase operational stability and aircraft availability and also optimise asset values. The Ecosystem has five principles that will benefit the customers: it is open to collaborate and link with customers or external digital solutions, modular to make individual use of parts feasible and it is neutral, meaning, that a customer stays independent of OEMs and MROs. It is also secure, granting customers full control and ownership of their data. Last but not least, the Ecosystem will be seamless to ensure a consistent workflow and data access across solutions.

OTHER NEWS

Frankfurt Airport (FRA) welcomed some 48.9 million passengers in 2022 – nearly doubling the figure for 2021 and resulting in an increase of 97.2% in passenger numbers. At the start of last year, demand was still restrained over concerns about the spread of the omicron variant of the corona virus. However, from March 2022 until the end of the year, passenger traffic saw dynamic growth. Leisure travel benefited from a rebound in demand as anti-COVID measures and travel restrictions were gradually lifted. During the main vacation periods of 2022, monthly traffic in Frankfurt saw strong triple-digit growth rates compared to 2021 – reaching a peak of over 300% in April. In the



© Frankfurt Airport

fourth quarter, passenger traffic continued thriving at a monthly rate of between 40 and 50%. Demand for business travel also recovered steadily towards the end of the year. Compared with the 2019 pre-crisis level, FRA's passenger volume was still down by 30.7% in 2022. In 2022, FRA's aircraft movements increased by 45.9% year-on-year to 382,211 take-offs and landings (2019 comparison: down 25.6%). Accumulated maximum take-off weights (MTOWs) grew by 37.1% year-on-year to about 24.2 million metric tonnes (2019 comparison: down 23.9%). Cargo volumes in Frankfurt (comprising airfreight and airmail) noticeably decreased by 13.3% year-on-year to around 2.0 million metric tonnes in 2022 (2019 comparison: down 5.6%). The main factors contributing to this decline included the airspace restrictions related to the war in Ukraine, the zero-COVID strategy pursued by China throughout almost the entire year and the overall economic slowdown. All airports actively managed by the Fraport Group around the globe reported strong growth during 2022, with Fraport's Greek airports in the lead. Combined 2022 traffic figures for the Greek gateways even exceeded the 2019 pre-crisis levels for the first time since the pandemic.

Slovenia's Ljubljana Airport (LJU) saw traffic rise by over 100% year-on-year to 970,152 passengers during the full year of 2022 (2019 comparison: down 43.6%).

Fraport's two Brazilian airports of Fortaleza (FOR) and Porto Alegre (POA), combined, recorded some 12.4 million passengers in 2022 – a 41.0% gain compared to 2021 (2019 comparison: down 19.9%). At Peru's Lima Airport (LIM), traffic soared by 72.0% to about 18.6 million passengers in 2022 (2019 comparison: down 21.2%).

Fraport's 14 **Greek regional airports** served some 31.2 million passengers overall in 2022, an increase of 79.0% compared to 2021 (2019 comparison: up 3.5%).

The Bulgarian coastal airports of **Burgas** (BOJ) and **Varna** (VAR) saw combined traffic in 2022 advance by 59.2% year-on-year to around 3.1 million passengers (2019 comparison: down 37.1%).

Traffic at **Antalya Airport** (AYT) on the Turkish Riviera jumped by 41.8% year-on year to about 31.1 million passengers in 2022 (2019 comparison: down 12.4%).



OTHER NEWS

Aviation software specialist Rusada has announced the opening of a new office in Toronto, Canada to support customers and business development in the region. The new location will provide easy access to customers in Canada and the Northeast of the U.S., with Montreal, Chicago, New York, and Washington D.C., all only a short flight away. Having commenced business in 1987, Rusada has since expanded to eight locations around the globe from which it develops, supports and sells its airworthiness, maintenance and flight operations software ENVISION. The new Canadian office adds to its presence in North America, which began with its Colorado office which opened in 2017. Since then, the company has added numerous North American clients to its customer base and established partnerships with key industry integrators. With the new office Rusada aims to continue this recent run of success and further tap into the region's market potential.



© Rusada will open a new office in Toronto, Canada



United has opened its expanded inflight training centre in Houston

© United Airlines

United Airlines has opened its newly refurbished and expanded Houston inflight training centre. At a cost of US\$32 million (£26 million) the now 56,000 ft² facility more than doubles the existing training premises and will enable the carrier to remain on track to hire 15,000 new staff, including 4,000 flight attendants, in 2023. The new facility includes additional classroom and training spaces, cabin and door trainers and a state-of-the-art aquatic centre where the safe evacuation of a plane in the event of an unlikely water landing can be practiced. In addition, the campus now includes inflight service training spaces with mock seats, a 400+-seat auditorium and a public address room where trainees can practice their onboard announcements. United has included an underground prefabricated storm detention vault that can hold more than 268,000 gallons of water and store storm water runoff in large underground pipes or vaults. It is United's intention to train 600 new flight attendants every month whereby they will undergo a six and a half-week course followed by a refresher course every eighteen months for their qualifications to remain up to date. United has operated for more than 70 years from its hub at George Bush Intercontinental Airport and is one of the largest employers with over 11,000 local employees and plans to hire 1,800 more in 2023.

At the annual Airline Economics conference in Dublin, Angus Kelly, the CEO of Dublin, Ireland-based AerCap, the world's largest aircraft lessor, warned that delivery problems currently being faced by aircraft manufacturers such as Boeing and Airbus resulting in over-promising and under-delivering were likely to continue for many years. Beyond this, Kelly also made it clear that in his opinion, aircraft manufacturers were not being sufficiently transparent with carriers and that notice of any delays to ordered aircraft were being issued far too late in the day. "The challenge with the OEMs (original equipment manufacturers) today is the short-dated nature of how they're notifying airlines of the delays," Kelly said. "If you're an airline looking towards the summer of 2023, you've sold the seats, you've hired the crews, you've booked the slots and if the airplane doesn't show up, you're in real trouble," adding that some airlines were opting to buy 20-year-old aircraft rather than take a risk on new models. As one of Airbus' largest customers, he went on to say that: "I think candidly that we have seen Airbus sell too much on massive optimism about what they could deliver. We've seen several revisions of what Airbus thought they would deliver in 2022. I think we're going to see that the feature of the OEMs for years to come." According to Reuters news agency, the CEO of rival lessor Air Lease Corporation has issued a similar warning, saying manufacturers would struggle to meet their delivery commitments in 2023



Angus Kelly, AerCap

© AerCap

after over-promising to airlines last year. Kelly did strike an optimistic note with regard to the uptick in demand for travel, anticipating that global demand should return to pre-pandemic levels by mid-2023. "While it's true there's less disposable income in the wallet, we as the aviation industry, the travel industry are not competing against as many things for our share of the wallet," he said.



MILITARY AND DEFENCE

Honeywell, U.S. Army complete first flight of next-generation navigation solution

The U.S. Army has completed the first flight of Honeywell's EAGLE-M Embedded Global Positioning System/Inertial Navigation System (EGI) with M-Code capabilities. Honeywell is ready to deliver these qualified units featuring next-generation M-code GPS in 2023 to the U.S Army and other customers. In collaboration with Honeywell, the Army conducted successful testing of the M-Code-enabled EGI units on the MQ-1C Gray Eagle Unmanned Aircraft System (UAS), which validated its airworthiness to be deployed on military aircraft. M-Code is more resilient than the current generations of global positioning systems (GPS). This next-generation navigation solution enhances the resiliency of the GPS navigation solution to enemy actions. The U.S Army will begin migrating its fleet to the Honeywell EAGLE-M EGI with M-Code in early 2023.

OTHER NEWS

Ethiopian Airlines, the largest network operator in Africa, has finalised all preparations to commence a new service between Addis Ababa, Ethiopia and Atlanta, U.S.A. Ethiopian Airlines will operate four-times-weekly flights to Atlanta (ATL) starting from May 16, 2023. Commenting on the launch of the new flight, Ethiopian Airlines Group CEO Mesfin Tasew said, "We are truly delighted to open our sixth gateway in North America with the new flight to Atlanta. We have been connecting the U.S. and Africa for 25 years now and the new service will help boost the investment, tourism, diplomatic and socio-economic bonds between the two regions. As a pan-African carrier, we are committed to further expand our global network and connect Africa with the rest of the word. We are also keen to better serve the U.S. by increasing our destinations and flight frequencies."

Qantas is expanding its codeshare partnership with IndiGo. The national carrier launched the first phase of its codeshare agreement with India's largest domestic carrier in August last year, offering customers seamless connections from Qantas flights in Bengaluru and Delhi onto IndiGo services to other major Indian cities, including Mumbai and Chennai, as well as smaller destinations such as Pune and Goa. Under the second phase of the agreement, Qantas customers can now travel to an additional eight cities, bringing the total number of Indian destinations available for connection from Delhi and Bengaluru to 21. Qantas customers will also have more choice across IndiGo's domestic network with more than 250 new flights available for booking.

INDUSTRY PEOPLE



Dean N. Gerher

 ORIX Aviation has appointed Dean N. Gerber as Advisor to the Board of Directors of ORIX Aviation. Primarily based in the U.S., Gerber will work with the senior management team at ORIX Aviation across a broad

range of commercial activities. Gerber previously served as General Counsel to ORIX Aviation from 2019 to 2021. Prior to that, he was the Chair of the Global Transportation Finance team at Vedder Price. He currently serves as Board President of the International Society for Transport Aircraft Trading (ISTAT).

• Lilium N.V., developer of the all-electric vertical take-off and landing (eVTOL) Lilium jet, has released that the Board of Directors has appointed Oliver Vogelgesang as Chief Financial Officer (CFO) and Sebastien Borel as Chief Commercial Officer (CCO) with immediate effect. Vogelgesang will take over from Geoffrey Richardson, who is stepping down following a successful tenure, including bringing Lilium through a listing on NASDAQ. As experienced aerospace executives currently in senior leadership roles at Lilium, Vogelsang and Borel are uniquely positioned to support CEO Klaus Roewe in the continued development of Lilium's eVTOL jet. Vogelsang joined Lilium in July 2021 as SVP Finance & Controlling, tasked with building the controlling and investor relations functions. He brings almost 30 years of finance and aerospace experience, most recently serving as Managing Director Finance Airbus Germany and SVP Finance & Controlling of the important Airbus A320 programme. Borel joined Lilium in November 2021 as Vice President, Business and was appointed SVP Commercial in April 2022. Prior to joining Lilium, he held various key management positions at Honeywell and Airbus in addition to his start-up experience in the U.S., including at the InfoTrust Group (now Flatirons Solutions). Since his start at Lilium, he has finalised MoUs and binding contracts for orders of more than 600 aircraft.

• Spirit AeroSystems has named Mark Miklos Senior Vice President of the company's defence and space business, effective April 1, 2023. Miklos will replace Duane Hawkins, current Executive Vice President, President Defence & Space, who has announced his intent to retire at the end of March 2023. Hawkins, who joined Spirit in 2013, will remain with the company in an advisory role following his retirement. Miklos will become a member of the Spirit Executive Leadership Team, reporting directly to Tom Gentile, President and Chief Executive Officer. He is currently Vice President in Spirit Defence & Space with responsibility for the company's high-temperature composites business in Maine and the executive lead for the company's hypersonic strategy. Miklos joined Spirit in January 2020 as a part of the acquisition of Fiber Materials, Inc. (FMI). He was CEO of FMI for three years, from 2017 to 2020.



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THE AIRCRAFT AND ENGINE MARKETPLACE

Commercial Jet Aircraft

Commercia	ai Jet Airciait								
Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
A319-100	FPG Amentum	V2527M-A5	3705	2008	Now	Sale / Lease	Eoin Kirby	eoin.kirby@fpg-amentum.aero	+353 86 027 3163
A319-100	BBAM	CFM56-5B5/P	2119	2004	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A319-100	BBAM	CFM56-5B5/P	2283	2007	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A320-200	BBAM	CFM56-5B4/3	6467	2015	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A320-200	ORIX Aviation	CFM56-5B4/3	4714	2011	Q3/2023	Lease	Oisin Riordan	oisin.riordan@orix.ie	+353 86 335 0004
A320-233ceo	FPG Amentum	V2527E-A5	4457	2010	Now	Sale / Lease	Lei Ma	ma.lei@fpg-amentum.aero	+852 9199 1875
A330-200	GA Telesis	PW4168A	322	2000	Jul 2022	Sale / Lease	David Byrne	aircraft@gatelesis.com	+353 86 780 8974
A330-300	BBAM	Trent 772B-60	1633	2015	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A330-300	BBAM	Trent 772B-60	1609	2015	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A330-300	BBAM	Trent 772B-60	1482	2014	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
A350-900	ORIX Aviation	TRENTXWB-84	391	2020	Now	Sale / Lease	Cian Coakley	cian.coakley@orix.ie	+353 86 335 0004
B737-800	BBAM	CFM56-7B26/3	29637	2009	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
B737-800	ORIX Aviation	CFM56-7B26/3	35216	2007	Now	Lease	Oisin Riordan	oisin.riordan@orix.ie	+353 86 335 0004
B737-900	BBAM	CFM56-7B26/3	34953	2007	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
B737 MAX 8	ALTAVAIR	Leap	43564	2022	Now	Lease	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
B737 MAX 8	ALTAVAIR	Leap	60135	2022	Now	Lease	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
B757-200 Cargo	Airwork Ireland Limited	RB211-535E4	27051	1995	Now	Lease	Robbie Brazel	robbie.brazel@airworkgroup.com	+353 87 372 8262
B757-200 Cargo	Airwork Ireland Limited	RB211-535E4	25297	1992	Q4/2022	Lease	Robbie Brazel	robbie.brazel@airworkgroup.com	+353 87 372 8262
B777-300ER	BBAM	GE90-115BL	38407	2011	Mar 2023	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
B777-300ER	ALTAVAIR	GE90-115B	34600	2006	Now	Sale / Lease	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
B777-300ER	ALTAVAIR	GE90-115B	39700	2009	Now	Sale / Lease	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
Regional J	et / Turboprop Airc	raft							
Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
CRJ-200	Regional One	CF34-3B1	7925	2004	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200	Regional One	CF34-3B1	7926	2004	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200	Regional One	CF34-3B1	7937	2004	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200	Regional One	CF34-3B1	7941	2006	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200ER	Regional One	CF34-3B1	8062	2006	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200ER	Regional One	CF34-3B1	8059	2005	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ-200LR	Regional One	CF34-3B1	7625	2002	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ900	Regional One	CF34-8C5	15215	2009	Now	Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ900	Regional One	CF34-8C5	15207	2008	Now	Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ900ER	Regional One	CF34-8C5	15111	2007	Now	Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
CRJ900ER	Regional One	CF34-8C5	15115	2007	Now	Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
DHC8-Q400	Regional One	PW150A	4042	2001	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
DHC8-Q400	Regional One	PW150A	4100	2005	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
ERJ-145LR	Regional One	AE3007	145508	2001	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
ERJ-145LR	Regional One	AE3007	145515	2001	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
ERJ170-100LR	Regional One	CF34-8E5	17000093	2005	Now	Sale / Lease	Kurt Brulisauer	kbrulisauer@regionalone.com	+1 (404) 542-5320
SAAB 2000	Jetstream Aviation Capital	AE2100A	031	1996	Now	Sale / Lease	Donald Kamenz	dkamenz@jetstreamavcap.com	+1 (305) 447-1920 x 115
	Jetstream Aviation Capital	CT7-9B	224	1990	Now	Lease	Bill Jones	bjones@jetstreamavcap.com	+1 (305) 447-1920 x 102
	Jetstream Aviation Capital	CT7-9B	450	1998	Now	Lease	Bill Jones	bjones@jetstreamavcap.com	+1 (305) 447-1920 x 102
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THE AIRCRAFT AND ENGINE MARKETPLACE

Commercial Engines

Commercial Engines					
CF34 Engines	Sale / Lease	Company	Contact	Email	Phone
CF34-8E5	Now - Lease	Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368
CF34-10E	Now - Lease				
CF34-8C	Now - Lease				
CF34-3A	Now - Sale / Lease				
(2) CF34-10E5	Now - Sale / Lease	DASI	Joe Hutchings	joe.hutchings@dasi.com	+ 1 954-478-7195
(3) CF34-10E6	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) CF34-10E7	Now - Lease				. (,
(1) CF34-8C5A1	Now - Sale/Lease/Exch.	Magellan Aviation Group	Bradley Hogan	bradley.hogan@magellangroup.net	+1 980.256.7120
(2) CF34-8C5B1	Now - Sale/Lease/Exch.	magenan / maden Greap	Diddicy riogan	bradicy.nogan@magenangroup.net	1 300.200.7 120
(3) CF34-8E5A1	Now - Sale/Lease/Exch.				
(1) CF34-10E6	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
CFM Engines	Sale / Lease	Company	Contact	Email	Phone
(1) CFM56-5B3/3	Now - Lease	FTAI Aviation LLC			+1 786-785-0777
		FTAI AVIALION ELC	Mark Napoles	mnapoles@ftaiaviation.com	+1700-703-0777
(1) CFM56-5B4/P	Now - Lease				
(1) CFM56-5B3/P	Now - Lease				
(1) CFM56-5B1/P	Now - Lease				
(1)CFM56-7B24	Now - Lease				
(1) CFM56-7B26	Now - Lease				
(1) CFM56-5B4/P	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(2) CFM56-7B24/E	Now - Lease				
(1) CFM56-7B26	Now - Lease				
(2) CFM56-5C4/P	Now - Lease				
(1) CFM56-7B26/3	Now - Lease				
(2) CFM56-5C4	Now - Lease				
(1) CFM56-7B26E	Now - Lease				
(2) CFM56-5B5/P	Now - Sale / Lease	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7040
(1) CFM56-5B4/P	Now - Sale / Lease				
(2) CFM56-5B6	Now - Sale / Lease				
(1) CFM56-5A3	Now - Sale	Royal Aero	Gary MacLeod	gary@royalaero.com	+44 (0)1357 521144
(1) CFM56-5B2/P	Now - Sale/Lease/Exch.	Contrail Aviation Support	Mark Shaw	mark@contrail.com	+33 6 5834 1965
(1) CFM56-7B24/E	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(2) CFM56-7B27E/B1F	Now - Lease	3	ŭ	ů č	
(2) CFM56-5B3/3	Now - Lease				
(1) CFM56-5B4/3	Now - Lease				
(1) CFM56-5C4/P (u/s)	Now - Sale	Castlelake	Stuart MacGregor	Stuart.macgregor@castlelake.com	+44 207 190 6138
(1) CFM56-7B22/3	Now - Lease				111201 100 0100
(1) CFM56-5B6/3	Now - Sale / Lease	GA Telesis		engines@gatelesis.com	
(1) CFM56-7B27	Now - Lease	57.10.00.0		chgmoo@gatolosio.com	
(2) CFM56-7B26	Now - Sale				
(1) CFM56-5B3/P	Now - Sale/Lease/Exch.	Magellan Aviation Group	Prodley Hogen	bradley began @magallangrays not	+1 980.256.7120
• •		wagonari / wation Group	Bradley Hogan	bradley.hogan@magellangroup.net	+1 900.230.7 120
(2) CFM56-5B6/P	Now - Sale/Lease/Exch.				
(1) CFM56-7B27	Now - Sale/Lease/Exch.	0	• • • •		
GE90 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) GE90-94B	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) GE90-115BL (Propulsor)	Now - Lease				
(2) GE90-90B	Now - Sale/Lease/Exch.	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7039
LEAP Engines	Sale / Lease	Company	Contact	Email	Phone
(1) LEAP-1A35	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(3) LEAP-1B28	Now - Lease				
PW1100G Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW1100G-JM	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
PW 4000 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW4168	Now - Sale / Lease	Castlelake	Graeme Dodd	Graeme.dodd@castlelake.com	+44 207 190 6138
(1) PW4168A	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(2) PW4168A	Now - Sale / Lease	GA Telesis		engines@gatelesis.com	
(1) PW4168A	Q4/2022 - Sale	ALTAVAIR	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
PW Small Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW121	Now - Sale/Lease/Exch.	Magellan Aviation Group	Bradley Hogan	bradley.hogan@magellangroup.net	+1 980.256.7120
(1) PW123	Now - Sale/Lease/Exch.	•	, ··-g-···	, 0 0 -9	
(1) PW127F	Now - Sale/Lease/Exch.				
(1) PW127M	Now - Sale/Lease/Exch.				
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(1) PW150A	NOW - Sale/Lease/EXCN.				



THE AIRCRAFT AND ENGINE MARKETPLACE

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Commercial Engines					
PW Small Engines	Sale / Lease	Company	Contact	Email	Phone
PW119B RGB	Now - Lease	Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368
PW119B	Now - Lease				
PW120A	Now - Lease				
PW121 (ATR)	Now - Lease				
PW124B	Now - Lease				
PW123B	Now - Lease				
PW125B	Now - Lease				
PW127F	Now - Lease				
PW150A	Now - Lease				
PW127M	Now - Lease				
PW150A RGB	Now - Lease				
(1) PW150A	Now - Sale/Lease/Exch.	Willis Lease	David Desaulniers	leasing@willislease.com	+1 (561) 349-8950
(1) PW150A	Now - Sale/Lease/Exch.		Duane Butler		+1 561-809-0001
Trent Engines	Sale / Lease	Regional One Company		Dbutler@regionalone.com	
			Contact	Email	Phone
(2) Trent 772B-60	Now - Sale/Lease/Exch.	Rolls-Royce & Partners Finance	RRPF Marketing	RRPFMarketing@rolls-royce.com	+44 7528975877
(1) Trent XWB-84	Now - Sale/Lease/Exch.				
(1) Trent 556-61	Now - Sale/Lease/Exch.				
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(3) V2533-A5	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) V2524-A5	Now - Lease				
(1) V2527-A5	Now - Lease				
(2) V2527-A5	Now - Sale / Lease	Castlelake	Graeme Dodd	Graeme.dodd@castlelake.com	+44 207 190 6138
(1) V2533-A5	Now - Lease	FTAI Aviation LLC	Mark Napoles	mnapoles@ftaiaviation.com	+1 786-785-0777
(2) V2527-A5	Now - Sale/Lease/Exch.	Magellan Aviation Group	Bradley Hogan	bradley.hogan@magellangroup.net	+1 980.256.7120
(1) V2533-A5	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) V2527E-A5	Now - Lease	-	_		
(4) V2527-A5	Now - Sale / Lease	GA Telesis		engines@gatelesis.com	
(2) V2533-A5	Now - Sale / Lease			g	
Aircraft and Engine Parts, C		Equipment			
Description	omponents and wisc	Company	Contact	Email	Phone
·	Now - Sale				+1-312-549-4459
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(1) A321 Enhanced Landing Gear 2020 OH					
(2) A320, (2) A330, (1) A340 Landing Gear Sh	nipsets	GA Telesis		landinggearsales@gatelesis.com	
(1) A320 ENH NLG					
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TSCP700-4E	Now - Sale				
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(1) GTCP131-9B, (1) GTCP331-500B	Now - Sale / Lease				
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(2) APS2300, (1) APS3200	Now - Sale / Lease	DASI	Chris Glascock	chris.glascock@dasi.com	+1 954-801-3592
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(2) GTCP36-150RJ		•	ŭ	5 5	
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